

REMARKS

Applicant has carefully reviewed the Office Action mailed September 11, 2006 and offers the following remarks.

Before addressing the rejections, Applicant provides a brief summary of the present invention so that the remarks relating to the rejections are considered in the proper context. The present invention is directed to a mobile terminal that is capable of communication via a cellular-based network, as well as via the public switched telephone network (PSTN) or a packet network through a local wireless interface using a terminal adaptor, such that, a call originating from the cellular network is transitioned to the local wireless network. Accordingly, a primary emphasis of the present invention is establishing a new connection between the wireless switch, which is supporting the cellular call, and the mobile terminal through the terminal adaptor using the local wireless interface. Once the new connection is established, the call is transitioned to that new connection.

Claims 1 and 30 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Specifically, the Patent Office states that the phrase “remote terminal” is not mentioned in the Specification. Applicant respectfully traverses. MPEP § 2163 states that “[t]o satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. See, e.g., *Moba, B.V. v. Diamond Automation, Inc.*, 325 F.3d 1306, 1319, 66 USPQ2d 1429, 1438 (Fed. Cir. 2003); *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d at 1563, 19 USPQ2d at 116.” Further, the application as filed is presumed to satisfy the written description requirement of 35 U.S.C. § 112, first paragraph and, therefore, the “Patent Office has the initial burden of presenting evidence or reasons showing that one of ordinary skill in the art would not recognize in the disclosure a description of the invention defined by the claims.” *In re Wertheim*, 541 F.2d 257, 263, 191 U.S.P.Q. 90, 97 (CCPA 1976). Although the Patent Office states that “remote terminal” is not mentioned in the Specification, the Patent Office does not present any evidence or reasons for the rejection as required by the MPEP and relevant case law and, therefore, has failed to satisfy its burden. Accordingly, since the Patent Office has not satisfied its burden to provide evidence or reasons to support the rejection, the rejection under 35 U.S.C. § 112, first paragraph, is improper and must be withdrawn. Accordingly, claims 1 and 30 are allowable under 35 U.S.C. § 112, first

paragraph. Withdrawal of the rejection based 35 U.S.C. §112, first paragraph, is respectfully requested.

Claims 1 and 30 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication No. 2002/0147008 A1 to Kallio (hereinafter “Kallio”). Applicant respectfully traverses. Applicant initially notes that it appears that claims 1, 2, 7-15, 30, 31, 36-44 were also rejected under 35 U.S.C. § 102(e) as being anticipated by Kallio. For a reference to be anticipatory, the reference must disclose each and every claim element. Further, the elements of the reference must be arranged as claimed. MPEP § 2131. The requirement that each and every element be disclosed in the manner claimed is a rigorous standard that the Patent Office has not met in this case.

Claims 1 and 30 recite, *inter alia*, a call having first and second connections (first element), establishment of a third connection in response to a handoff request (second element), and connecting the second connection to the third connection to effect a handoff (third element). Accordingly, the second and third connections are used to effect the handoff.

The first element of claim 1 recites “receiving a handoff request from a wireless switch supporting a call to the mobile terminal over a cellular access network, the call comprising a first connection from the wireless switch to the mobile terminal and a second connection between the wireless switch and a remote terminal”. (Emphasis added). The handoff request, therefore, is received from the wireless switch, which is supporting a call between a “mobile terminal” and a “remote terminal”. The call comprises first and second connections. The Patent Office contends that this element of claim 1 is disclosed in paragraph 0043, lines 1-4, in Fig. 4 and in paragraph 0049 of Kallio (Office Action mailed September 11, 2006, page 3, lines 5-10). The Patent Office is incorrect. These portions of Kallio disclose a connection between the Mobile Station 150 and the Mobile Switch Center 120. The connection between the Mobile Station 150 and the Mobile Switch Center 120 is disconnected after the handover and a new connection is established between the Mobile Switch Center 120 and the Wireless Mobile Center 210. The Patent Office admits this aspect in the Office Action. (*Id.* at lines 8-9). Notwithstanding the foregoing, the Patent Office incorrectly equates the pre-handover connection of Kallio as the “first” connection of claim 1 and the post-handover connection of Kallio as the “second” connection of claim 1. Clearly, though, since the second connection of Kallio occurs after the handover it cannot exist at the time of the handover request. Therefore, the connections disclosed in the portions of Kallio

cited by the Patent Office are not the same as the first and second connections of the call of claim 1. Additionally, claim 1 recites that a handoff request is received from the wireless switch. The portions of Kallio cited by the Patent Office disclose that the handover request is sent by a Base Station Subsystem 110 towards the Mobile Switch Center 120. (Kallio, paragraph 0049). Thus the handover request in Kallio is not from the wireless switch. Accordingly, the Patent Office has failed to show where Kallio discloses the first element of claim 1.

The second element of claim 1 recites “effecting establishment of a third connection to the mobile terminal via a terminal adaptor, which supports local wireless communications with the mobile terminal”. The Patent Office cites to paragraph 0050, lines 14-15 of Kallio to support the rejection of the second element of claim 1. This portion of Kallio, though, is the last sentence of paragraph 0050, which states that “[t]he Mobile Station (MS) 150 is handed over and starts to use the WLAN radio”. Clearly, there is no mention of a third connection or any connection in this sentence. Assuming that the Patent Office is contending that this sentence implies a connection, a point which Applicant does not concede, Kallio would be disclosing a connection that exists after the handoff. Additionally, nothing in this portion of Kallio discloses the establishment of a third connection prior to affecting a handoff. In a similar fashion with the Patent Office’s arguments with respect to the first element of claim 1, the Patent Office is incorrectly equating the post-handoff connections, or, in this instance, condition of Kallio with a connection recited in claim 1. Therefore, the portion of Kallio cited by the Patent Office does not disclose “effecting establishment of a third connection to the mobile terminal via a terminal adaptor”. Accordingly the Patent Office has failed to show where Kallio discloses the second element of claim 1.

The third element of claim 1 recites “providing a handoff instruction to the wireless switch to connect the second and third connections to effect handoff of the call from the cellular connection to the local wireless connection”. (Emphasis added). Therefore, the handoff is achieved by connecting the second connection with the third connection. The Patent Office cites to paragraph 0050, lines 1-4 of Kallio to support the rejection of the third element of claim 1. This portion of Kallio discloses that the Wireless Mobile Center 210 “will send a handover request acknowledgement message and the handover procedure will continue”. The portion of Kallio cited by the Patent Office does not disclose connecting a second connection with a third connection to effect a handoff, nor does it disclose any procedure for effecting a handoff.

Additionally, the rest of paragraph 0050 of Kallio discloses that the Mobile Switch Center 120 sends a “handover command to the Mobile Station (MS) 150”. (Kallio, paragraph 0050, line 6). In claim 1, the wireless switch is provided with handoff instructions. In contrast, in Kallio, the Mobile Switch Center 120 is not performing the handoff. This is confirmed further in the cited paragraph which states that “[t]he Mobile Station (MS) 150 will then contact the WLAN radio and send handover access or directly handover detect-message via the wireless LAN 200 and AGW 310, to the MSC 120.” (*Id.* at lines 7-10). Therefore, in Kallio, the Mobile Station 150 is effecting the handover and not the Mobile Switch Center 120. This is possible since the handover in Kallio is performed internally to the network disclosed in Kallio. In other words, Kallio discloses an intra-network handover and, therefore, does not disclose any connections external to the network that effect an inter-network handover.

Since Kallio does not disclose each and every element of claim 1, Kallio cannot and does not anticipate claim 1. Accordingly, claim 1 is allowable and withdrawal of the rejection of claim 1 under 35 U.S.C. § 102(e) is respectfully requested. Claim 30 is a system claim reciting the same elements as claim 1 in system format and, therefore, claim 30, is allowable for at least the same reasons as claim 1. Withdrawal of the rejection of claim 30 under 35 U.S.C. § 102(e) is respectfully requested. Additionally, claims 2, and 7-15, depend from claim 1, and claims 31, and 36-44 depend from claim 30. Therefore, claims 2, 7-15, 31, and 36-44 are allowable for at least the same reasons as claim 1. Withdrawal of the rejection of claims 2, 7-15, 31, and 36-44 under 35 U.S.C. § 102(e) is respectfully requested. Notwithstanding this, certain of the dependent claims require special mention.

Claims 2 and 31 recite that “the third connection is established in part between a wireline switch and the terminal adaptor.” The Patent Office argues that the Wireless Mobile Center 210 is a wireline switch and cites to an element in Figure 1 labeled as WLAN access point with WMC SW WMC 210. Notwithstanding the letters “SW”, nothing in Figure 1 of Kallio indicates that the element numbered as 210 is a wireline switch. In fact, the element 210 in Figure 1 has only one line connected to it indicating that it does not perform any switching function. This is confirmed in Kallio. Kallio discloses that the WLAN, through a hotspot LAN, is connected only to the A-interface gate (AGW) 310 and the Internet Location Register (ILR) 320. (*Id.* at paragraph 0028). Additionally, Kallio, in numerous instances, describes the Wireless Mobile Center 210 as part of the wireless local area network (WLAN) “arranged to

serve as a WLAN access point”. (Kallio, Abstract). As a WLAN access point, the Wireless Mobile Center 210 contains “one or more radio transceivers”, includes “authentication algorithms” to confirm user identity, includes a handover algorithm, and includes other software for “providing the handover request and other handover messages”. (*Id.* at paragraphs 0029 and 0030). Clearly, therefore, the Wireless Mobile Center 210 is not intended to be and, therefore is not, a wireline switch or any switch. In contrast, when Kallio refers to a switch, such as the Mobile Switch Center 120, Kallio clearly discloses the switching function. (*Id.* at paragraph 0025). Kallio does not refer to any switching function when describing the Wireless Mobile Center 210. Therefore, the element labeled as WMC SW WMC 210 in Figure 1 of Kallio is not a wireline switch. Thus, the portion of Kallio cited by the Patent Office does not disclose a wireline switch or a third connection established between a wireline switch and the terminal adaptor. Since Kallio fails to disclose each and every element of claims 2 and 31, Kallio cannot and does not anticipate claims 2 and 31. Accordingly, claims 2 and 31 are allowable. Withdrawal of the rejection of claims 2 and 31 under 35 U.S.C. § 102(e) is respectfully requested.

Claims 7 and 36 recite that “the third connection is established in part over a packet network operatively coupled to the terminal adaptor.” The Patent Office cites to paragraph 0033 of Kallio to support the rejection of these claims. The cited portion of Kallio discloses only that the wireless LAN 200 and the GSM network may use different protocols and that the Mobile Station 150 “may adapt the different call control protocol”. (Kallio, paragraph 0033, lines 11-12). The cited portion of Kallio, therefore, does not disclose a terminal adaptor or a third connection, or any connection, being “established in part over a packet network operatively coupled to the terminal adaptor.” Since Kallio fails to disclose each and every element of claims 7 and 36, Kallio cannot and does not anticipate claims 7 and 36. Accordingly, claims 7 and 36 are allowable. Withdrawal of the rejection of claims 7 and 36 under 35 U.S.C. § 102(e) is respectfully requested.

Claims 3 and 32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kallio in view of U.S. Patent No. 6,373,828 B1 to Stewart et al. (hereinafter “Stewart”). Applicant respectfully traverses. To establish *prima facie* obviousness, the Patent Office must show where each and every element of the claim is taught or suggested in the combination of references. For the Patent Office to combine references in an obviousness rejection, the Patent

Office must prove there is a suggestion to combine the references. For the Patent Office to prove that there is a suggestion to combine the references, the Patent Office must do two things. First, the Patent Office must state a motivation to combine the references, and second, the Patent Office must support the stated motivation with actual evidence. *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). MPEP § 2143.03. If the Patent Office cannot establish obviousness, the claims are allowable.

Claim 3 depends from claim 2, which depends from claim 1. Claim 32 depends from claim 31, which depends from claim 30. Therefore, claims 3 and 32 contain all of the elements of claims 1 and 2, and 30 and 31, respectively. Claims 3 and 32 recite the additional limitation that the “handoff request is received and the handoff instructions are provided using a cellular protocol while the establishment of the third connection is effected using a public switched telephone network-based protocol”. As mentioned above, nothing in Kallio discloses a third connection. Accordingly, Kallio is deficient in teaching or suggesting providing the handoff instructions using cellular protocol or the establishment of a third connection via a terminal adaptor. This deficiency is not cured by combining Stewart with Kallio. The portions of Stewart cited by the Patent Office disclose a handoff between a MSC based wireless communication system and a Generic C-based wireless communication system. (Stewart, Fig. 4, col. 7, lines 40-44 and col. 8, lines 45-52). Nothing in the portions of Stewart cited by the Patent Office teaches or suggests that the establishment of a third connection is effected using public switched telephone network-based protocol via a terminal adaptor. Therefore, the Patent Office has failed to show where each and every element of claims 3 and 32 is taught or suggested in the combination of Stewart with Kallio. Accordingly, the Patent Office has failed to establish *prima facie* obviousness of claims 3 and 32 based on the combination of Stewart with Kallio and the rejection of claims 3 and 32 under 35 U.S.C. §103(a) is improper making claims 3 and 32 allowable. Withdrawal of the rejection of claims 3 and 32 under 35 U.S.C. §103(a) is respectfully requested.

The Patent Office contends that “[t]o one of ordinary skill in the art, it would have been obvious to modify Kallio with Steward (sic) at the time of the invention such that the establishment of the third connection is effected using a public switched telephone network-based protocol, to provide a method of handing off communications from a cellular network to a wireline network (i.e. DECT). (Office Action mailed September 11, 2006, page 6).

Notwithstanding that the portions of Kallio or Stewart cited by the Patent Office do not disclose handing off communications from a cellular to a wireline network, nor do they disclose the establishment of a third connection via a terminal adaptor, the Patent Office must state a motivation to combine Stewart with Kallio and the Patent Office must support the stated motivation with actual evidence found in Stewart and Kallio. *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). MPEP § 2143.03. The Patent Office has not shown where evidence of motivation to combine Stewart with Kallio is found in either Kallio or Stewart.

Further, as mentioned, above, Kallio discloses an intra-network handover process; one that is totally internal to the network architecture. Stewart, on the other hand, discloses an inter-network handover process that functions between a Generic C-based wireless network and a MSC-based wireless network. Therefore, to combine Stewart with Kallio, Stewart and/or Kallio would have to be modified. Any such modification, though, would destroy the intended purpose or function of that reference. Therefore, the modification is improper and a rejection based thereon is improper. *In re Gordon* 733 F2d. 900,902 (Fed. Cir. 1984). Accordingly, claim 3 and 32 are allowable for this additional reason.

Claims 4, 5, 33, and 34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kallio in view of U.S. Patent No. 6,243,581 B1 to Jawanda (hereinafter “Jawanda”). Applicant respectfully traverses. The standards for obviousness are set forth above.

Claims 4 and 33 recite that “the third connection is established in part between first and second media gateways, the first media gateway connected to the wireless switch via a cellular-based trunk and the second media gateway connected to the wireline switch via a public switched telephone network-based trunk, the method further comprising sending call initiation messages to the first and second media gateways and the wireline switch to establish the third connection.” The Patent Office states that Kallio teaches a first media gateway and cites to Figure 4 element number 310 “AGW”, but admits that Kallio does not teach a second media gateway connected to a wireline switch via a public switched telephone network based trunk. The Patent Office, also, states that Jawanda teaches a second media gateway connected to a wireline switch via a public switched telephone network-based trunk. (Office Action mailed September 11, 2006, pages 6 and 7). Claims 5 and 34 recite that “the first and second media gateways facilitate interworking between the cellular-based trunk and the public switched telephone network-based trunk over a packet network.”

The Patent Office contends that “Kallio teaches that a call initiation message is sent along the path from the serving network to the target network (Par. 49-50), so to a skilled artisan it would be obvious to do the same in the communication network of Jawanda such that the message would pass through the first and second gateway and the wireline switch to establish the third connection”. The Patent Office further argues that it would have been obvious to one skilled in the art to modify Kallio with Jawanda. (Office Action mailed September 11, 2006, page 7). As mentioned above with respect to combining Stewart with Kallio, the Patent Office is required to articulate a motivation to combine references and must support the stated motivation with actual evidence found in the references. *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). MPEP § 2143.03. The Patent Office has not provided actual evidence of the motivation to combine Jawanda with Kallio. Therefore, the combination is improper and a rejection based thereon is improper. Therefore, the Patent Office has failed to establish *prima facie* obviousness of claims 4, 5, 33 and 34 based on the combination of Jawanda with Kallio. Thus, the rejection of claims 4, 5, 33 and 34 under 35 U.S.C. §103(a) is improper, and, accordingly, claims 4, 5, 33 and 34 are allowable. Withdrawal of the rejection of claims 4, 5, 33 and 34 under 35 U.S.C. §103(a) is respectfully requested.

Claims 6 and 35 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kallio in view of U.S. Patent No. 6,181,938 B1 to Salmela et al. (hereinafter “Salmela”). Applicant respectfully traverses. The standards for obviousness are set forth above.

Claims 6 and 35 recite “the third connection is established using a directory number associated with the mobile terminal when supported via the terminal adaptor.” The Patent Office cites to the Abstract of Salmela to support its argument “that it is well known in the art to use one primary number (i.e. mobile directory number) regardless of whether the terminal is located in one network or another.” (Office Action mailed September 11, 2006, page 8). In addition the Patent Office argues that it is “obvious that the third connection would be established using the directory number of the mobile terminal when supported via the terminal adaptor.” (*Ibid.*). As mentioned above, though, Kallio does not teach or suggest the establishment of a third connection via a terminal adaptor. Since the portion of Salmela cited by the Patent Office does not teach or disclose a third connection via a terminal adaptor, combining Salmela with Kallio does not cure this deficiency. Therefore, the Patent Office has failed to show where each and every element of claims 6 and 35 is taught or suggested in the combination of Salmela with

Kallio. Accordingly, the Patent Office has failed to establish *prima facie* obviousness of claims 6 and 35 based on the combination of Salmela with Kallio and, therefore, the rejection of claims 6 and 35 under 35 U.S.C. §103(a) is improper and claims 6 and 35 are allowable. Withdrawal of the rejection of claims 6 and 35 under 35 U.S.C. §103(a) is respectfully requested.

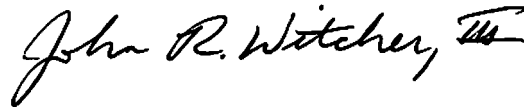
Notwithstanding the foregoing, the Patent Office argues that it would have been obvious to one skilled in the art to modify Kallio with Salmela. As mentioned above, the Patent Office is required to articulate a motivation to combine references and must support the stated motivation with actual evidence found in the references. *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). MPEP § 2143.03. The Patent Office has not provided actual evidence of the motivation to combine Salmela with Kallio. Therefore, the modification is improper and a rejection based thereon is improper. Accordingly, claims 6 and 35 are allowable for this additional reason.

The present application is now in condition for allowance and such action is respectfully requested. The Examiner is encouraged to contact Applicant's representative regarding any remaining issues in an effort to expedite allowance and issuance of the present application.

Respectfully submitted,

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